

### **Testimony**

Before the Subcommittee on Human Resources Committee on Government Reform and Oversight House of Representatives

For Release on Delivery Expected at 11:00 a.m. EDT Wednesday April 29, 1998

### BUREAU OF LABOR STATISTICS

# Making the CPI More Reflective of Current Consumer Spending

Statement of Bernard L. Ungar, Director Government Business Operations Issues General Government Division



The principal source of information on trends in consumer prices and inflation in the United States is the Consumer Price Index (CPI), which is published by the Bureau of Labor Statistics (BLS). To determine the level of inflation in consumer prices, the CPI tracks prices for a fixed "market basket" of goods and services that urban consumers purchase for day-to-day living.

As requested by the Subcommittee, GAO's testimony today addresses certain topics related to the CPI. The first is the need for BLS to make the CPI expenditure weights more current by updating them more frequently than at 10-year intervals, as GAO reported in October 1997. BLS uses expenditure weights to aggregate market basket items into the overall index number. The preponderance of evidence GAO obtained pointed to the need for and advantages of more frequent updates. This evidence included the (1) views of professionals knowledgeable about the CPI, (2) practices of other countries, (3) results of research that show that the age of expenditure weights affects the CPI, and (4) the sizable effect more frequent updates could have on the federal budget in comparison to the relatively small costs associated with updates. BLS has said it agrees with GAO's recommendation for more frequent updates and is considering the appropriate update frequency.

GAO also examined how well those elements of BLS' strategic plan and performance plan that focus on improving the CPI would meet the criteria in the Government Performance and Results Act of 1993 and related guidance, even though the BLS plans are not required to comply with the statutory requirements. In examining BLS' fiscal year 1999 performance plan, GAO found that it was partially successful in providing a picture of BLS' intended performance to improve the CPI's quality. Further, the plan did not fully portray how BLS' strategies and resources would help achieve the performance goals for improving CPI quality or how BLS would ensure that the data it uses to assess its performance are credible.

GAO also reviewed the linkage between the goals in BLS' strategic plan relating to improving the CPI and the 1996 Boskin commission recommendations to BLS. GAO found linkages between some, but not all, of the commission's recommendations and the plan's performance goals and indicators. Neither BLS' strategic plan nor its fiscal year 1999 performance plan discusses such linkages or the lack of them. BLS and the Department of Labor question the usefulness of discussing recommendations contained in particular reports, such as the Boskin commission report, in long-range planning documents. However, GAO believes such a discussion

Page 1 GAO/T-GGD-98-115

would enhance the plans' usefulness and credibility to CPI stakeholders given the great interest shown in the Boskin commission recommendations by Congress and others.

Page 2 GAO/T-GGD-98-115

Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to assist the Subcommittee in its deliberations with the Bureau of Labor Statistics (BLS) on the Consumer Price Index (CPI), one of the most important indexes produced by the federal government. The Subcommittee has asked us to address several topics related to making the CPI more reflective of current consumer spending.

According to BLS, the CPI is the principal source of information on trends in consumer prices and inflation in the United States and affects nearly all Americans because of the many ways it is used. For example, it is often used to increase wages and benefit payments to adjust for the erosion of consumer purchasing power due to inflation. In 1997, the federal government adjusted the benefits of 43.6 million Social Security beneficiaries and 21.4 million food stamp recipients because of the growth in consumer prices as reported by the CPI. In addition, federal tax brackets are adjusted automatically by the CPI to prevent inflation-induced increases in tax rates.

To gauge the level of inflation in consumer prices, the CPI tracks prices for a fixed "market basket" of goods and services that urban consumers purchase. These purchases are for food, clothing, shelter, fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. Only those expenditures made by consumers (not including businesses) are captured in the CPI.

Congress has been concerned with whether the CPI accurately reflects consumer spending, and the Senate several years ago chartered the Advisory Commission to Study the Consumer Price Index (also referred to as the Boskin commission). The commission concluded in its December 1996 report that the fixed market basket CPI (1) becomes less and less representative of consumer spending over time as consumers respond to price changes and new consumer choices and (2) overstates the true cost of living. The commission estimated the size of the overstatement for the next few years to be 1.1 percentage points per year, and it made recommendations to BLS and to the President and Congress. Within the community of professional economists and statisticians, the commission's report is supported by some and opposed by others.

Page 3 GAO/T-GGD-98-115

 $<sup>^{\</sup>rm l}$  The Boskin commission's December 1996 report to the Senate Committee on Finance was titled Toward a More Accurate Measure of the Cost of Living.

As requested, I will discuss three topics today: (1) the need for and advantages of more frequent updating of the CPI expenditure weights, (2) the nature of the work we are currently doing with regard to the CPI, and (3) BLS' coverage of CPI improvement efforts in its strategic plan and fiscal year 1999 annual performance plan.

### Need for and Advantages of More Frequent Updating of the CPI Expenditure Weights

In an October 1997 report, we concluded that the CPI expenditure weights should be updated more frequently than at the current rate of approximately every 10 years to make the fixed market basket CPI more timely in its representation of consumer expenditures. The CPI is based on a fixed market basket of goods and services purchased by urban consumers. These items are assigned weights by BLS to give proportionate emphasis for price changes of one item in relation to other items in the CPI. The weights used to aggregate the items into the overall index number for the CPI are based on the Consumer Expenditure Survey, which BLS uses to determine what goods and services consumers are buying. Historically, BLS has changed the expenditure weights only when making major revisions to the CPI. Since 1940, that has occurred about every 10 years.

My comments on the need for and advantages of more frequent updating of the CPI expenditure weights are based largely on our October report and will provide information on (1) the views of individuals knowledgeable about the CPI on the issue of updating the expenditure weights between major revisions to the CPI, (2) the updating practices of other industrial countries, (3) the cost to update the expenditure weights, (4) the possible effect on the federal budget of more frequent updates, and (5) BLS' response to our recommendation that it should update the expenditure weights more frequently.

More Frequent Updating Deemed Desirable by Individuals Knowledgeable About the CPI We spoke with 10 individuals who were former officials of BLS or who had otherwise studied the CPI, and they were unanimous in stating that 10 years between updates of the expenditure weights was too long. However, there was less agreement among the individuals on exactly how often the updating should occur. Five, including the chairman and three members of the Boskin commission, said more frequent updating of expenditure weights was less important than other ways of making the CPI more reflective of current consumer spending. Dr. Boskin told us that if there were no changes in existing products or no new products in the economy,

Page 4 GAO/T-GGD-98-115

 $<sup>^2\</sup>mathrm{Consumer}$  Price Index: More Frequent Updating of Market Basket Expenditure Weights Is Needed (GAO/GGD/OCE-98-2, Oct. 9, 1997).

then updating the expenditure weights would be the only step that BLS would need to take. However, since the economy does change, with new products being developed and product improvements occurring constantly, he believed more frequent updating was only one step among a number that should be taken to improve the CPI.

#### Practices of Other Industrial Countries

We also obtained information on the updating practices in Japan, Italy, Germany, France, Canada, and the United Kingdom, which along with the United States have made up the Group of Seven (G-7) countries.<sup>3</sup> All of them track consumer prices through a market basket of goods and services and weight the prices of the items in the market basket. According to information provided by BLS and contained in international publications, all six update their consumer price indexes more often than the United States. Two updated the weights of their consumer price indexes annually, and the other 4 did so approximately every 5 years. However, BLS officials noted that the updates by the six countries do not comprise the same level of detail as used for the CPI; for example, some do not use consumer expenditure surveys as does the United States.

### Cost to Update the Expenditure Weights Is Estimated to Be Relatively Small

The estimated cost of updating the expenditure weights is relatively small in comparison to the cost of major revisions. To estimate the cost for our October 1997 report, we assumed that an update to the expenditure weights would have occurred in 1992 and would occur in 2003, which is 5 years after major revisions to the CPI market basket. On the basis of data supplied by BLS, the estimated cost to have updated the weights in 1992 would have been \$2.4 million spread over 3 years. According to BLS, the estimated cost to update the expenditure weights in 2003 would be \$3.1 million over a 3-year period. In comparison, BLS reported that the major CPI revision in 1987 cost \$47 million over 5 years and, at the time of our report, expected the cost of the 1998 major revision to be about \$66 million over 6 years. BLS explained this difference in cost by pointing out that an update of the expenditure weights would exclude many activities that are included in major CPI revisions.

### More Frequent Updates Could Affect the Federal Budget

Because federal tax brackets and federal payments, such as those to Social Security beneficiaries, are adjusted for inflation, a CPI that more accurately measures inflation could affect the federal budget. BLS estimated the annual range of change in the CPI, if the expenditure weights were updated

Page 5 GAO/T-GGD-98-115

<sup>&</sup>lt;sup>3</sup>The G-7 countries have met to coordinate economic and monetary policy.

on a 5-year cycle, from 0 (zero)—no change—to a decrease of 0.2 percentage point. We asked the Congressional Budget Office (CBO) to use the midpoint of BLS' range (a decrease of 0.1 percentage point) to estimate the effect on the federal budget. CBO estimated that, assuming no other changes in policy or economic assumptions, if updating the weights in 2003 (5 years after the 1998 major revision) reduced CPI growth by 0.1 percentage point annually, the projected budget surplus would be increased by a cumulative total of \$16.5 billion over the 5-year period of 2004 through 2008.<sup>4</sup>

Most of the impact of such a reduction in the CPI would be on federal outlays—such as reduced payments to Social Security beneficiaries, which account for most of the outlays—and most of the impact would occur in the later years. For example, according to estimates by SSA actuaries using an annual 0.1 percentage point reduction in CPI growth, the average monthly benefit check for retired workers in 2004 would be reduced by \$0.91, from \$939.94 to \$939.03; by the fifth year (2008), the average monthly check would be reduced by \$4.86, from \$1,065.98 to \$1,061.12.

#### BLS' Response to Our October 1997 Recommendation

In our October 1997 report, we recommended that as long as a fixed market basket CPI is published, the Commissioner of BLS should update the expenditure weights of the CPI's market basket of goods and services more frequently than every 10 years. BLS plans to publish, starting in 2002, a CPI index based on the concept of superlative index formulas, which would enable that index to be more current than the fixed market basket index in reflecting consumer spending. The Boskin commission recommended use of a superlative index formula to construct the CPI, although BLS believes the recommendation did not specify how a true superlative index might be constructed. Moreover, BLS does not view the superlative index as a replacement for the fixed market basket index, and said it would continue to publish the fixed market basket CPI.

In commenting on GAO's recommendation, the BLS Commissioner said she supports more frequent updates of the expenditure weights. However, she said neither economic theory nor empirical evidence demonstrates the superiority of any particular update interval. This has been the principal reason why BLS has not updated the expenditure weights between major revisions to the CPI. Other reasons cited by BLS included difficulties in

Page 6 GAO/T-GGD-98-115

 $<sup>^4</sup>$ In our October 1997 report, we gave a 4-year CBO projection of \$10.8 billion, which was based on a March 1997 baseline. CBO used a March 1998 baseline to make the 5-year projection.

obtaining funds to bring about change to the CPI and concern with what would be the best approach to improve the CPI.

Although theoretical guidance is not available on all facets of updating expenditure weights, such as exactly how often updates should occur, the preponderance of the data we reviewed supported the need for updating expenditure weights more frequently than approximately every 10 years. Recognizing that the data are not perfect and do not isolate the effects of using outdated expenditure weights, comparisons of price indexes with old and new weights that go back to those made for the first revision in 1940 indicate that price indexes computed with more current weights were always different from indexes computed with older weights. These comparisons and more recent research conducted by BLS tend to show lower rates of inflation with indexes using newer weights.

Since last fall when we received the Commissioner's comments, the Commissioner has told this Subcommittee that BLS is committed to more frequent updating of the weights used to calculate the CPI. In March 1998, the Commissioner said that, although BLS had not yet decided on the optimal frequency of weight updates, it was clear that a reduction in the current (approximately 10-year) period between updatings was warranted.

### Current GAO Work on the CPI

At the request of the Ranking Minority Member of the Senate Committee on Governmental Affairs, the Honorable John Glenn, we are gathering information from BLS related to the quality adjustment issues raised by the Boskin commission. To better inform policymakers and other commentators on this issue, we have been asked to describe the policies, procedures, and practices that BLS currently uses to account for differences between a new item and the item it replaced. This replacement process is necessary when an item is no longer available for BLS to price. Within this process, BLS determines if the new item is comparable to (i.e., the same as) the old item that disappeared. We are in the process of collecting information to describe what BLS does when the two items are not comparable. We anticipate issuing our report early next year.

Page 7 GAO/T-GGD-98-115

BLS' Coverage of CPI Improvement Efforts in Its Strategic Plan and 1999 Performance Plan For this testimony, you asked us to review certain planning documents BLS prepared for improving the accuracy of the CPI. The model for such planning documents is the Government Performance and Results Act of 1993, also referred to as the Results Act. The Act seeks to improve the efficiency, effectiveness, and accountability of federal programs by establishing a system to set goals for programs based on their intended purposes, measure the performance of those programs, and use performance information to improve results. As you know, if successfully implemented, the Results Act will help agencies focus on how to improve their programs' performance in achieving desired results.

The approach to performance-based management and accountability envisioned by the Results Act is a dynamic and iterative process in which one stage builds on and reinforces the progress made at earlier stages. Under the Results Act, agencies first were to prepare long-term strategic plans that set the general direction for their efforts. The strategic plans agencies prepared were to be the starting point for agencies to set performance goals for programs in their annual performance plans.

The Results Act does not require component agencies of departments, such as BLS, to prepare strategic and annual performance plans. However, some component agencies have prepared those plans as BLS has done at the direction of the Department of Labor. Although the strategic and annual performance plans prepared by component agencies such as BLS are not required to comply with the requirements of the Results Act, these component agencies may use the statutory requirements as guidance in developing their strategic and performance plans. In addition, the Department of Labor instructed BLS to follow OMB's guidance to federal agencies for implementing the Results Act in preparing its annual performance plan. Moreover, Labor included the entire BLS strategic plan as part of the department's strategic plan.

BLS' strategic plan includes an agency strategic goal to "improve accuracy, efficiency, and relevancy of our economic measures and program outputs through increased application of state-of-the-art statistical techniques, economic concepts, technology, and management processes." The CPI is one of these economic measures, and one of the strategic plan's objectives is to improve the quality of the CPI. The strategic plan provides performance goals and performance indicators for this objective (see app. I for those for fiscal year 1999).

Page 8 GAO/T-GGD-98-115

BLS' fiscal year 1999 annual performance plan lists the same agency performance goals and performance indicators for the CPI that are listed for fiscal year 1999 in BLS' strategic plan. Thus, the performance goals and indicators in the 1999 annual performance plan are linked to those in the strategic plan.

#### Observations on BLS' Fiscal Year 1999 Annual Performance Plan

As you requested, we reviewed BLS' performance plan for fiscal year 1999, focusing on the plan's elements that related to the objective of improving the quality of the CPI. To do this review, we used criteria in the Results Act, Office of Management and Budget's (OMB) guidance on developing the plans (Circular A-11, part 2), our February 1998 guidance for congressional review of the plans,<sup>5</sup> our April 1998 guidance for assessing agencies annual performance plans, and the December 17, 1997, letter to omb Director Raines from eight congressional leaders that includes suggestions for how to make the performance plans more useful. For purposes of our analysis, we collapsed the six requirements for annual performance plans in the Results Act and the related guidance into three core questions: (1) To what extent does the agency's performance plan provide a clear picture of intended performance across the agency? (2) How well does the performance plan discuss the strategies and resources the agency will use to achieve its performance goals? (3) To what extent does the agency's performance plan provide confidence that its performance information will be credible?

Overall, BLS' fiscal year 1999 performance plan would partially meet the criteria in the Results Act and related guidance, although, as stated previously, we recognize that the plan was not required to comply with the statutory requirements. Considering that this is the first Results Act performance plan that BLS has produced, the plan contains a great deal of useful information to inform Congress and others about how BLS intends to accomplish its mission. We expect that as BLS gains experience, future performance plans will build upon this initial effort and become increasingly more useful to Congress and the public. Specifically with respect to the CPI, BLS' fiscal year 1999 performance plan provides a partial picture of BLS' intended performance relative to its goals aimed at improving the quality of the CPI. Further, the plan does not fully portray how BLS' strategies and resources will help achieve BLS' performance goals

Page 9 GAO/T-GGD-98-115

<sup>&</sup>lt;sup>5</sup>Agencies' Annual Performance Plans Under the Results Act: An Assessment Guide to Facilitate Congressional Decisionmaking (GAO/GGD/AIMD 10.1.18, Feb. 1998).

<sup>&</sup>lt;sup>6</sup>The Results Act: An Evaluator's Guide to Assessing Agency Annual Performance Plans (GAO/GGD-10.1.20, April 1998).

for improving CPI quality or how BLS will ensure that information it uses to assess actual performance against CPI improvement goals is accurate, complete, and consistent.

Under the criteria in the Results Act and related guidance, agency annual performance plans are to contain goals for each of the program activities identified in the agency's budget and should express them in objective, quantifiable, and measurable form to allow comparison between actual and planned performance. Agencies can use their discretion in determining their performance goals. Agency plans should also contain indicators to be used in measuring or assessing the relevant outputs, service levels, and outcomes of each program activity. In our view, BLS' performance goals associated with improving the quality of the CPI, which are shown in appendix I, are linked to its budget and are objective and measurable. As BLS notes, the goals are generally expressed as significant milestones expected to be accomplished during the given year.

Because of the way in which the goals are expressed, BLS' performance indicators for accomplishing the milestones are activity or output oriented rather than outcome oriented. BLS notes this in its plan and says that, over time, it will show how its indicators relate to desired outcomes, such as improving the accuracy of the CPI. The use of output-oriented goals is allowed under OMB's guidance for implementing the Results Act. The guidance notes that, although outcomes should be used whenever possible, outputs may be used for several reasons, including when outcomes may not be scheduled for achievement in the fiscal year covered by the plan. However, it appears to us that the goals and indicators BLS cites in its performance plan are, for the most part, changes to the CPI that BLS expects to complete in fiscal year 1999 that are aimed at improving the CPI's quality. Thus, it would appear that BLS' performance plan would be more fully responsive to OMB's guidance if the goals or indicators included an outcome dimension to reflect the results of BLS' activities. Such outcome-oriented goals or indicators could relate to improvements in the accuracy, efficiency, or relevancy of the CPI.

Furthermore, BLS' goals and indicators could be more specific and quantifiable to enable better stakeholder comparisons of actual results with established goals. For example, BLS' indicator for its performance goal to expand the Consumer Expenditure Survey (CE) sample is: "Begin data collection and processing of larger sample." In its justification for its submission for the President's budget, BLS requested resources to expand the sample size of the CE by approximately 50 percent. The performance

Page 10 GAO/T-GGD-98-115

goal as set forth in the annual plan is not as specific, however, and does not inform the reader that BLS plans to expand the CE by 50 percent. Also, if the baseline measure cited the prior CE sample size, which it does not do, then CPI stakeholders could determine whether BLS has achieved its goal to expand the CE by 50 percent when it reports its results. We also note that none of the performance goals to improve the quality of the CPI provide baseline measures.

Under the criteria in the Results Act and related guidance, annual performance plans should briefly describe the agencies' strategies and the human, capital, financial, and other resources they will use to achieve their performance goals. BLS' performance plan indicates that state-of-the-art statistical techniques, economic concepts, technology, and management processes will be applied to achieve its performance goals aimed at improving the quality of the CPI. It also mentions the operational processes and technological advances that BLS is making. Further, the plan points out that BLS is requesting additional funding for fiscal year 1999 of about \$9.1 million and 36 full-time equivalent employees to undertake initiatives needed to improve the CPI's timeliness and accuracy.

However, BLS' performance plan does not fully portray how BLS' strategies and resources will help achieve the BLS performance goals. We believe such information would better enable CPI stakeholders to see how BLS intends to achieve each goal and the associated resources it will need to do so. BLS' performance plan does link each performance goal aimed at improving the quality of the CPI with BLS' program activities listed in the President's budget and shows the increased amount of funding and full-time equivalent staff associated with achieving all such goals. However, BLS' performance plan does not show the funding level associated with the individual program activities identified in its performance plan, as provided in OMB's Results Act guidance.

Finally, under the criteria in the Results Act and related guidance, agencies should describe the means to be used to verify and validate performance data. According to this guidance, the means used should be credible and specific to ensure that performance information is sufficiently complete, accurate, and consistent. BLS' performance plan for fiscal year 1999 does not specify the procedures BLS intends to use to verify and validate the information related to its performance goals for improving CPI quality. However, in its performance plan for fiscal year 1999, BLS states that over time it will validate its indicators by showing how they relate to desired outcomes, such as improving accuracy. In addition, we believe it would be

Page 11 GAO/T-GGD-98-115

more useful to CPI stakeholders if the plan included information to demonstrate the credibility of the data BLS will use to measure its performance.

Observations on Linkage Between Boskin Commission's Recommendations and BLS' CPI Performance Goals and Indicators As you requested, we also compared the extent to which certain BLS performance goals and performance indicators contained in its strategic plan that relate to improving the CPI reflected the recommendations made in December 1996 by the Boskin commission.

Overall, we found linkages between BLS' performance goals and indicators relating to improving the CPI and three Boskin commission recommendations (see app. II). The commission referred to these specific recommendations as short-run recommendations—that is, those that the commission thought could be implemented immediately, with little additional resources or no data collection initiatives. These recommendations were to develop a monthly index that would adopt a superlative index formula at the upper level of aggregation in the index, to be called the CPI, and replace the current fixed market basket CPI; use a geometric means formula at the lower level of aggregation in the CPI;9 and expand the use of regression techniques. We based the linkages on concepts that were identified in the recommendations and the performance goals and indicators. For example, we made a linkage between the Boskin recommendation that said BLS should move to a geometric means at the elementary aggregates level and the performance goal and related indicators that mentioned geometric means.

BLS' performance goals and indicators that we linked did not always address the full scope of the Boskin recommendations. For example, BLS has identified a series of performance indicators for the performance goal "develop alternative measures of change in living costs" that would result in published superlative indexes by fiscal year 2002, which we linked to the third Boskin commission recommendation. We note that the plan's discussion of this performance goal and its indicators does not address several aspects of that Boskin recommendation, such as abandoning the

Page 12 GAO/T-GGD-98-115

<sup>&</sup>lt;sup>7</sup>The Boskin commission placed its recommendations to BLS into three categories: short run, intermediate run, and longer run. We placed two unclassified recommendations into a general/overall category.

<sup>&</sup>lt;sup>8</sup>The Boskin commission referred in its recommendation to a particular form of superlative index but BLS does not agree that the form referred to should be characterized as a superlative index.

<sup>&</sup>lt;sup>9</sup>On April 16, 1998, BLS announced that, beginning in January 1999, it will use a geometric mean formula to aggregate the lower-level categories for approximately 61 percent of total consumer spending represented in the CPI.

current fixed market basket CPI. In addition, this performance goal and related indicators indirectly relate to the two overall Boskin commission recommendations for BLS to establish a cost-of-living index as its objective and to develop and publish a monthly index and an annual index. If the strategic plan provided more detailed information, it would help inform stakeholders about the frequency (monthly and/or annually) with which the planned alternative index measures will be published and would allow CPI stakeholders to make appropriate linkages to the Boskin commission's recommendations.

We found no linkage between the performance goals and indicators and the eight intermediate and longer-run recommendations of the Boskin commission. To determine BLS' views on these recommendations, we relied upon a written statement BLS sent to the Chairman of the Joint Economic Committee in June 1997. BLS has provided Congress with its views on the Boskin commission report on several occasions; for example, in addition to the June 1997 statement, it also provided testimony to the Senate Budget Committee in January 1997 and to the House Budget Committee in March 1997. BLS informed us that any Boskin commission recommendation for which linkages cannot be identified in its strategic plan were those that either restate current BLS/CPI policy, are presently in development, or have been explicitly rejected by BLS. Further, BLS said that it had initiated work related to many of the areas covered by the Boskin commission's recommendations prior to the issuance of the commission's report.

BLS told us that both it and the Department of Labor question the usefulness of discussing recommendations contained in particular reports, such as the Boskin commission report, in long-range planning documents, including BLS' strategic plan and fiscal year 1999 annual performance plan. However, given the high degree of interest that Members of Congress, the Federal Reserve, and others who are concerned about the accuracy of the CPI have shown in the Boskin commission's report and recommendations, we believe that a discussion of the relationship of the goals in BLS' performance plan for fiscal year 2000 to the Boskin commission recommendations, or an explanation of the absence of such relationship, would add to the plan's credibility and usefulness to CPI stakeholders.

Page 13 GAO/T-GGD-98-115

 $<sup>^{10}\</sup>mbox{BLS},$  "Measurement Issues in the Consumer Price Index," paper prepared in response to a letter from Representative Jim Saxton, Chairman of the Joint Economic Committee, June 1997.

Mr. Chairman, this concludes my prepared statement. I would be pleased to respond to any questions that you or other Members of the Subcommittee may have.

Page 14 GAO/T-GGD-98-115

Page 15 GAO/T-GGD-98-115

## CPI-Related Objectives, Performance Goals, and Fiscal Year 1999 Performance Indicators

Table I.1: CPI-Related Objectives, Performance Goals, and Fiscal Year 1999 Performance Indicators for BLS' Strategic Goal to Improve Accuracy, Efficiency, and Relevancy of Economic Measures

Performance goal	Fiscal year 1999 performance indicator
Objective: Improve the quality of the Cons	umer Price Index (CPI)
Improve the CPI sample design and estimation methodology used for CPI rent and Owner's Equivalent (REQ) estimates.	Use new sample design and estimation methodology for rent and REQ in published CPI.
Update the CPI market basket's Housing sample to reflect current demographic and geographic population characteristics.	Updated Housing sample used in published CPI.
Update the CPI market basket's Commodities and Services sample to reflect current geographic population and expenditure patterns of all goods and services.	Published CPI includes  • certain previously unpriced services,  • prices collected for new goods and services entering the market place,  • quality adjustment for certain goods and services based on supplemental sample of prices and characteristics, and  • new item samples based on Telephone Point of Purchase Survey.
Develop alternative measures of change in living costs.	Produce updated superlative indexes in an enhanced research environment utilizing 1997 Consumer Expenditure Survey data.
Expand the Consumer Expenditure Survey sample.	Begin data collection and processing of larger sample.
Test an experimental CPI using geometric means.	Incorporate changes into the official CPI.
Objective: Improve service sector coverage Price Index, Producer Price Index, Internate	
Increase the coverage of service industries' price and productivity indexes.	Published CPI includes certain previously unpriced services.

Source: BLS' strategic plan and fiscal year 1999 performance plan.

Page 16 GAO/T-GGD-98-115

# Our Analysis of the Linkage Between the Boskin Commission's Recommendations and BLS' Strategic Plan for Fiscal Years 1998 Through 2002

Boskin commission's		Performance indicator, by the end of fiscal year			
recommendation	BLS' performance goal	1998	1999	2002 <sup>a</sup>	
General/overall					
1. BLS should establish a cost-of-living index as its objective in measuring consumer prices.	b	b	b	b	
2. BLS should develop and publish two indexes—one published monthly and the other published and updated annually and revised historically.	b	b	b	b	
<b>Short run</b> —recommendation data collection initiatives.	ons that the commission tho	ought could be implemented	d immediately, with little add	ditional resources or new	
3. The timely monthly index should continue to be called the CPI and should move toward a cost-of-living concept by adopting a "superlative" index formula to account for changing market baskets, abandoning the pretense of sustaining the Laspeyres formula.	Develop alternative measures of change in living costs.	Begin research on design issues.  Produce updated superlative indexes utilizing 1996 Consumer Expenditure Survey data.	Produce updated superlative indexes in an enhanced research environment utilizing 1997 Consumer Expenditure Survey data.	Publish production quality superlative indexes to supplement the official CPI.	
	Expand the Consumer Expenditure Survey sample.c	Prepare for sampling; hire and train interviewers.	Begin data collection and processing of larger sample.	d	
4. BLS should move to geometric means at the elementary aggregates level.	Test an experimental CPI using geometric means.	Determine which CPI basic indexes are best calculated with the geometric means formula.	Incorporate changes into the official CPI.	d	
BLS should greatly expand the use of hedonic regression techniques to deal with quality change. <sup>e</sup>	Update the CPI market basket's Commodities and Services sample to reflect current geographic population and expenditure patterns	f	Prices collected for new goods and services entering the market place.  Quality adjustment for	d	
Internalista um veferose	of all goods and services.		certain goods and services based on supplemental sample of prices and characteristics.		

**Intermediate run**—reforms that the commission said are feasible within the current state-of-the-art but that would require new data collection, reorganization of activities, and changes in the detail of the various sub-indexes produced by the CPI.

(continued)

Page 17 GAO/T-GGD-98-115

Appendix II Our Analysis of the Linkage Between the Boskin Commission's Recommendations and BLS' Strategic Plan for Fiscal Years 1998 Through 2002

Boskin commission's recommendation		Performance indicator, by the end of fiscal year		
	BLS' performance goal	1998	1999	2002 <sup>a</sup>
5. BLS should study the behavior of the individual components of the index to ascertain which components provide most information on the future longer-term movements in the index and which items have fluctuations that are largely unrelated to the total and emphasize the former in its data collection activities.	f	f	f	f
6. BLS should change the CPI sampling procedures to de-emphasize geography, starting first with sampling the universe of commodities to be priced and then deciding, commodity by commodity, what is the most efficient way to collect a representative sample of prices from which outlets, and only later turn to geographically clustered samples for the economy of data collection.	f	f	f	f
7. BLS should investigate the impact of classification, that is item group definition, on the price indexes, to improve the ability of the index to fully capture item substitution.	f	f	f	f

(continued)

Page 18 GAO/T-GGD-98-115

Appendix II Our Analysis of the Linkage Between the Boskin Commission's Recommendations and BLS' Strategic Plan for Fiscal Years 1998 Through 2002

Boskin commission's recommendation		Performance indicator, by the end of fiscal year		
	BLS' performance goal	1998	1999	2002ª
8. There are a number of additional conceptual issues that require attention. The price of durables, such as cars, should be converted to a price of annual services, along the same lines as the current treatment of the price of owner-occupied housing. Also, the treatment of "insurance" should move to an ex-ante consumer price measure rather than the currently used ex-post insurance profits based measure.	f	f	f	f
2. BLS needs a more permanent mechanism for pringing outside information, expertise, and research results to it.	f	f	f	f
<b>_onger run</b> —recommenda	tions the commission identi	fied as empha	sizing topics and areas that n	eed additional research and
10. BLS should develop a research program to look beyond its current "market basket" framework for the CPI.	f	f	f	f
1. BLS should investigate ne ramifications of the embedded assumption of orice equilibrium.	f	f	f	f
2. BLS should develop a number of new data collection initiatives to make some progress along these lines.	f	f	f	f

(Table notes on next page)

Page 19 GAO/T-GGD-98-115

Appendix II Our Analysis of the Linkage Between the Boskin Commission's Recommendations and BLS' Strategic Plan for Fiscal Years 1998 Through 2002

Note: The strategic plan includes additional agency performance goals and performance indicators, such as those related to the 1998 major revision of the CPI, which are excluded from this table because they cannot be directly linked with the stated Boskin commission recommendations. For a detailed response by BLS to the Boskin commission's recommendations, see "Measurement Issues in the Consumer Price Index," a paper prepared in response to a letter from Representative Jim Saxton, Chairman of the Joint Economic Committee, June 1997.

<sup>a</sup>For the agency performance goals listed, there were no performance indicators listed for fiscal years 2000 and 2001.

<sup>b</sup>To the extent that BLS addressed the short-run recommendations, we view these general/overall recommendations as having an indirect linkage to BLS' performance goals and performance indicators.

case part of its fiscal year 1998 budget enhancements proposal, BLS stated that an expanded Consumer Expenditure Survey would permit the CPI program to produce a superlative form index. We therefore linked this goal to the third recommendation. It could also be linked to a Boskin recommendation that was addressed to Congress—"Congress should provide the additional resources necessary to expand the CES sample and the detail collected, to make the POPS survey more frequent, and to acquire additional commodity detail from alternative national sources, such as industry surveys and scanner data."

<sup>d</sup>According to BLS officials, BLS expects to complete its milestones for the performance goal before fiscal year 2002.

eThis recommendation was added to the 12 stated recommendations because, according to commission members, "...we should have listed it as a numbered explicit recommendation in the last section, since at least one eminent scholar in the field interpreted its exclusion as a downweighting of its significance. We meant the opposite—it was so obvious (to us) as not to even require repetition as an explicit formal recommendation." (See Michael J. Boskin et al., "Consumer Prices, the Consumer Price Index, and the Cost of Living," Journal of Economic Perspectives, Vol. 12, No. 1, Winter 1998, ft. no. 11, p. 14.) We also classified it among the short-run recommendations since BLS has incorporated it in its strategic plan for fiscal year 1999.

No linkage was found between the Boskin recommendation and BLS' performance goals and indicators.

Source: BLS and Toward a More Accurate Measure of the Cost of Living, Final Report to the Senate Finance Committee from the Advisory Commission to Study the Consumer Price Index, December 4, 1996.

(410314) Page 20 GAO/T-GGD-98-115

#### **Ordering Information**

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

#### Orders by mail:

U.S. General Accounting Office P.O. Box 37050 Washington, DC 20013

or visit:

Room 1100 700 4th St. NW (corner of 4th and G Sts. NW) U.S. General Accounting Office Washington, DC

Orders may also be placed by calling (202) 512-6000 or by using fax number (202) 512-6061, or TDD (202) 512-2537.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

http://www.gao.gov

United States General Accounting Office Washington, D.C. 20548-0001

Bulk Rate Postage & Fees Paid GAO Permit No. G100

Official Business Penalty for Private Use \$300

**Address Correction Requested**